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PATENT  
Docket: 010481

### IN THE SPECIFICATION

Please replace the following paragraphs in the Specification with the rewritten paragraphs below:

[0001] This disclosure relates to frequency synthesizers, and more particularly to frequency synthesizers that can be flexibly implemented ~~implemeneted~~.

[0011] FIG. 4 is a circuit diagram of an exemplary voltage controlled oscillator including configurable circuitry in the form of switched capacitors.

[0024] Down mixer 15 produces baseband signals which can be filtered and sampled by analog to digital (A/D) converter 17 to produce corresponding digital values of the signals. One or more amplifiers 18, such as a digital ~~voltage-variable~~ gain amplifier (VGA), can be used to scale the digital baseband signal, either by amplifying or attenuating the digital values according to gain values received from an automatic gain control unit (not shown).

[0026] FIG. 2 is another block diagram of WCD 10, illustrating components implemented during RF signal transmission. In that case, baseband transmitter 24 may generate and forward baseband signals to up-mixer 25. Frequency synthesizer 20B provides carrier RF waveforms to up-mixer 25. Frequency synthesizer 20B may be the same synthesizer as frequency synthesizer 20A (FIG. 1), or may be a different synthesizer than that used for signal reception. In either case, frequency synthesizer 20B implements calibration techniques as outlined below to calibrate itself to generate oscillating signals at the correct operative frequency. Up-mixer 25 modulates the baseband signal into the RF carrier and forwards the modulated RF signal to amplifiers 26 for scaling. Amplifiers 26 may include one or more ~~voltage-variable~~ gain amplifiers (VGAs), driver amplifiers (DAs), and power amplifiers (PAs). The different amplifiers may reside on the same integrated circuit chip, or multiple different chips. Once the modulated RF signal has been adequately amplified or attenuated, RF transmitter 28 may transmit the modulated RF signal from wireless communication device 10 via antenna 12.